



## Multi-station Assembly Dial Helps Luxury Consumer Products Company Increase Production

### **The Challenge: Increase Production While Eliminating Error**

One manufacturer, known for their high-quality consumer products, faced forecasts that their current production capabilities could not handle. As a result, they needed to develop a system that could better facilitate part changeover and reduce cycle times—all while maintaining the integrity of their product.

In addition, the company was moving production from Europe to the US. To keep costs low, the system had to accurately assemble, inspect, and test their product with minimum operator support.

### **Designing an Indexing Dial**

Dials are an efficient way for a single operator to move parts through multiple stations with precision. They occupy a relatively small footprint, and their indexing speed allows for low cycle times.

In this case, Invotec leveraged an indexing dial to take components through assembly, inspection, and testing. Here's what we kept in mind while creating this solution:

**Efficiency:** Components were manually loaded into the feeder bowls at four locations, allowing a single operator to supply and monitor multiple parts.

**Quality:** The bowls fed testing stations where critical parts of the product were impact tested to expose any weak joints prior to assembly. A vision inspection of the impact-tested product verified quality.

A hot stamp marked approved parts while rejected parts were removed—reducing the risk of mixing the two.

**Control:** Once assembled, inspected, and tested, the parts were injected with a controlled, measured amount

of grease. The completed product was then offloaded to a good parts bin for shipment.

The overall process required only one operator with a 5-second cycle time and 30 minute changeover rate.

### **The Results**

With the multi-station assembly dial, the manufacturer was able to meet their production goals while maintaining the consistency and quality their products are known for.

Production was so successful, in fact, that the manufacturer later built a second system to further increase capacity.

To learn more about how Invotec helps solve complex manufacturing challenges, visit [www.invotec.com](http://www.invotec.com).